

IN THE CLAIMS:

1. (currently amended) A protective circuit for a supersonic humidifier comprising:

~~An~~ an input terminal of a DC source~~[[:]~~;

~~A~~ a voltage stabilizer stabilizing circuit connected to said input terminal of the DC source~~[[:]~~;

~~A~~ a drive circuit of ~~an~~ oscillator for driving an ultrasonic vibrating member, the drive circuit having a voltage dividing circuit and being electrically connected behind to said voltage stabilizing circuit; stabilizer and having a terminal P2 to form a signal dividing voltage circuit to be sent to a compare circuit and another terminal P1 to transmit signals to said compare circuit;

a compare circuit electronically connected to the drive circuit, the compare circuit having an OP amplifier with a first pin, a second pin, and a third pin;

~~Said compare circuit including an OP amplifier, which has a third pin receiving signal input from said terminal P2, and a second pin receiving signals from said first terminal; and,~~

wherein the ultrasonic vibrating member has a first terminal and a second terminal, the first terminal is connected to a first node of the drive circuit, the first node is electrically connected to the voltage stabilizing circuit, the first node is also electrically connected to two serially connected resistors of the compare circuit, the two resistors divide voltage from the voltage stabilizing circuit, a second node between the two serially connected resistors is electrically connected to the third pin of said OP amplifier; and

the second terminal is connected to the voltage dividing circuit, the voltage dividing circuit is connected to a first resistor of the compare circuit, a third node between the voltage dividing circuit and the first resistor is connected to the second pin of the OP amplifier;

wherein working current and working voltage of the ultrasonic vibrating member changes when water in a water tank of the supersonic humidifier is used up so that voltage at the second terminal increases, resulting in a voltage increase at the second pin of the OP amplifier; and when voltage at the second pin becomes higher than that at the third pin, the OP amplifier turns off, which in turn turns off transistors of the drive circuit so as to stop the operation of the ultrasonic vibrating member for protecting the supersonic humidifier.

~~Working current, working voltage and oscillating frequency of said oscillator immediately changing in case of no water left in a water tank of a supersonic humidifier, signal~~

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~~values of said terminal P2 and P1 then becoming different or changing excessively large so that said second and said third pin of said OP amplifier may have different input values, letting said first pin of said OP amplifier receive signal output to transmit to the subsequent circuit so as to stop operation of said drive circuit of said oscillator and protectively turn off said humidifier.~~

2. (new) The protective circuit for a supersonic humidifier in claim 1, wherein the voltage driving circuit comprises a second resistor and a diode in serial connection with the diode being connected to the first resistor of the compare circuit, and a capacitor with one end connected to a point between the diode and the first resistor and the other end connected to ground.
3. (new) The protective circuit for a supersonic humidifier in claim 1, wherein the first pin of the OP amplifier is connected to an integrated circuit.